

Patent Application of Edward W Sheehan and Ross C Willoughby for
"Laminated Lens for Introducing Gas-Phase Ions into the Vacuum Systems
of Mass Spectrometers Continued

Page 29

Abstract: An improved lens for collecting and focusing dispersed charged particles or ions having a stratified array of elements at atmospheric or near-atmospheric pressure, each element having successively smaller apertures forming a tapered terminus, wherein the electrostatic DC potentials are applied to each element necessary for focusing ions through the stratified array for introducing charged particles and ions into the vacuum system of a mass spectrometer. Embodiments of this invention are methods and devices for improving sensitivity of mass spectrometry when coupled to both high and low electrostatic field atmospheric pressure ionization sources.